

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/087358 A1

(51) International Patent Classification⁷:
9/00, B02C 4/08

B01F 7/00,

(72) Inventor; and

(75) Inventor/Applicant (for US only): VÉRONNEAU, Germain [CA/CA]; 1245 du Sommet, Saint-Paul-d'Abbotsford, Québec J0E 1A0 (CA).

(21) International Application Number:
PCT/CA2005/000399

(74) Agent: LÉGER ROBIC RICHARD; Centre CDP Capital, 1001 Victoria Square-Bloc E -8th Floor, Montréal, Québec H2Z 2B7 (CA).

(22) International Filing Date: 16 March 2005 (16.03.2005)

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

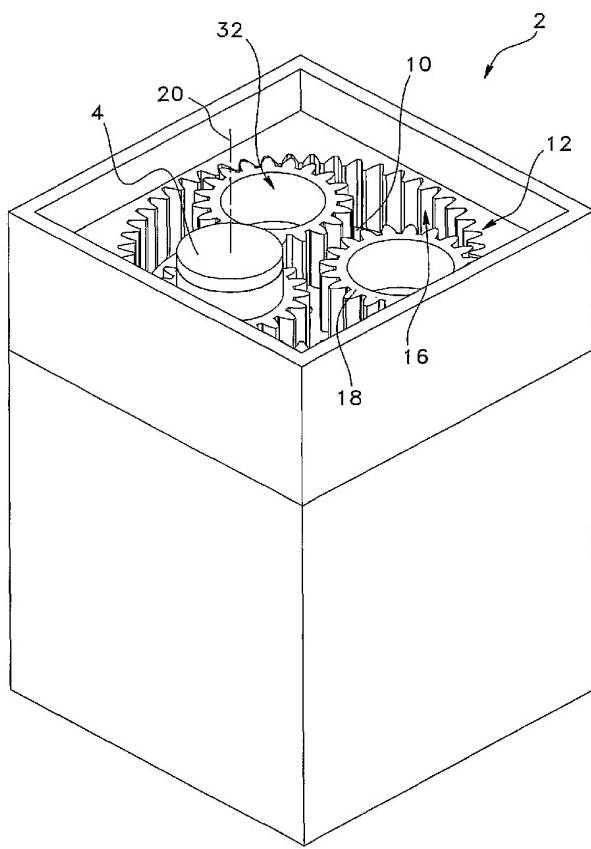
(26) Publication Language: English

(30) Priority Data:
2,461,269 16 March 2004 (16.03.2004) CA

(71) Applicant (for all designated States except US): PLASTIQUES GYF LTÉE [CA/CA]; 37, rue Tremblay, Saint-Jean-sur-Richelieu (secteur Saint-Athanase),, Québec J2X 2T5 (CA).

[Continued on next page]

(54) Title: BLADELESS MIXER



(57) Abstract: A bladeless mixer/mill for agitating and mixing a compound/product. The mixer/mill comprises a driving shaft rotatable about a first vertical axis of rotation, and a motor unit operatively coupled to the driving shaft for rotating the same. A support plate is mounted onto the driving shaft and is rotatable about the first vertical axis. The mixer/mill also has a stationary ring gear coaxial to the support plate. The stationary ring gear has a portion with an inner surface extending above the support plate. At least one pinion gear is rotatably mounted onto the support plate about a second vertical axis of rotation parallel to the first vertical axis of rotation. The pinion gear has an outer surface complementary to the inner surface of the stationary ring gear. The outer surface of the pinion gear meshes with the inner surface of the stationary ring gear. The pinion gear has a cavity wherein the compound/product to be agitated and mixed/milled is inserted.



(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— with international search report